

The salivary or “spit” glands are located close to the mouth and are classified as major or minor. The major salivary glands are paired on opposite sides of the mouth and produce the majority of saliva in our mouths. Saliva is necessary in the early digestion of foods and facilitates swallowing. The larger paired glands secrete saliva by ducts which open into the mouth. Bacteria occupy all areas of the mouth including the ducts which drain saliva. Infections of the glands can occur causing swelling, pain and scar tissue to form in or around the ducts. Obstruction of the normal flow of saliva can cause swelling of the glands which is worse with eating dry crackers or sour items such as dill pickles or lemons. Use of these foods can be used as a test for the mumps. The swelling can be quite dramatic and painful. Infections usually respond well to antibiotics but occasionally reoccur. Scar tissue can cause extensive obstruction of the ducts resulting in repeated swelling, pain, and infection. In such instances, the gland may have to be surgically removed.

Minor salivary glands are randomly located all around the mouth, in the lips, cheeks, floor of mouth and palate. These glands secrete clear mucous which functions to prevent the drying of the soft tissues of the mouth. These secretions account for the slimy feeling on the teeth after sleep. These glands are located in a layer below the surface of the lining of the mouth. Each is about the size of an English pea with a small duct draining to the surface of the mouth. Most often the ducts of these glands become scarred after accidentally biting the lip. During illness with high fever, the secretions may also become thicker due to dehydration and can plug the opening to the duct resulting in swelling of the gland. This fluid-filled swollen gland appears in the mouth as a clear or bluish colored blister called a **mucocele or mucous retention cyst** which gradually enlarges over time. In the lips they can get quite large and unsightly. Left untreated, eventually they burst exuding the thick contents. After a few days, the surface will heal and appear to have resolved. However, they frequently become cyclic in nature, repeatedly swelling and popping until the gland is removed. If the bite to the lip is severe, a portion of the gland can protrude through the wound into the mouth and be covered by lining tissue. These pink lumps frequently do not swell but will enlarge over time with repeated bite trauma. Both protruding glands and mucoceles require removal usually managed as an office procedure under local anesthesia.

The anatomical location of the major salivary glands requires them to drain upwards against gravity. Because of the minerals in saliva, occasionally stones will form in the drainage ducts. These can loosen, traveling to the opening of the gland. If they are too large to pass through the opening of the gland, they can obstruct the duct and cause the gland to swell significantly. Because of the bacteria in the duct, they often become infected. Early intervention within 24 to 48 hours to remove the stone can bring complete recovery. Left untreated, the abscess which forms will often eventually rupture into the mouth extruding the stone. The infection can result in scarring of the duct which may require the gland to be removed. Stones can be too large or too far from the mouth to pass on their own. Complete obstruction of the gland without treatment will result in withering away of the gland, cyclic swelling and pain requiring surgical removal or severe neck infections requiring extensive surgery. Stones frequently reoccur and may require multiple procedures over time. Lithotripter non-surgical treatment is a newer technology useful in large stones using sound waves to smash up the stones allowing them to more easily pass.

This is a hospital procedure requiring general anesthesia.